# **REMARKS**

The Office Action of June 15, 2006, has been carefully reviewed and this response addresses the concerns stated in the Office Action. All objections and rejections are respectfully traversed.

## I. STATUS OF THE CLAIMS

Claims 1-11, 29-33, 43-48, and 58-85 are currently pending.

Claims 12-28, 34-42, and 49-57 have been cancelled without prejudice. Applicants reserve the right to present these claims in a divisional application.

Claim 85 is allowable.

Claims 3-6, 48, 59-69, and 71-73 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants respectfully point out that claims 63 and 64 have been rejected under 35 U.S.C. § 112.

Claims 10, 33, 63, and 64 are rejected under 35 U.S.C. § 112, second paragraph.

Claims 1, 2, 7, 8, 29-32, 43-47, 58, 70, and 74-84 are rejected under 35 U.S.C. § 103 as being unpatentable over Kawamura, United States Patent Publication # US 2003/0053177, published March 20, 2003, filed on October 4, 2002 as a division of United States Patent # 6,480,313, filed on January 23, 1998 (Kawamura) in view of Freitas et al., United States Patent # 5,321,542, issued on June 14, 1994 (Freitas). Applicants respectfully point out that the claim list should read "claims 1, 2, 7-9, 11, 29-32, 43-46, 58, 70, and 74-84".

Claim 10 is rejected under 35 U.S.C. § 103 as being unpatentable over Kawamura in view of Freitas and in view of Zaudtke et al, United States Patent # 6,654,816, issued on November 25, 2003, filed on May 31, 2000 (Zaudtke), and in further view of Inoue et al., United Stated Publication # 2004/007731, published on April 22, 2004, filed on October 9, 2003, continuation of United States Patent # 6,643,284, filed on September 29, 1999 (Inoue).

Applicants respectfully note that Zaudtke issued over three years after Applicants' priority date, August 15, 2000. Applicants reserve the right to file an affidavit under 37 C.F.R. § 1.131 to swear behind Zaudtke. Applicants respectfully note that Inoue was published almost three years after the filing date of the present application, August 15, 2001. Applicants reserve the right to file an affidavit under 37 C.F.R. § 1.131 to swear behind Inoue.

Claims 9, 11, and 47 are rejected under 35 U.S.C. § 103 as being unpatentable over Kawamura in view of Freitas and further in view of Zaudtke.

Claim 33 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawamura in view of Freitas and further in view of Inoue.

## II. REJECTIONS UNDER 35 U.S.C. § 112

On page 2, in paragraphs 1 and 2, the Office Action states that claims 10, 33, 63, and 64 are rejected under 35 U.S.C. § 112, second paragraph, because, (1) with respect to claims 10, 33, and 63, it is not clear how the signal comprises or contains an XML element, and (2) with respect to claim 64, the term broadcast XML element lacks antecedent basis.

With respect to (1), it is submitted that a data signal is a transmission medium for data bits, and Applicants' claimed XML element is a computer construct that is formed of data bits. In Applicants' system, the data bits that form the XML element are transmitted in a data signal containing those bits. Therefore, Applicants' claimed signal comprises or contains an XML element.

With respect to (2), it is submitted that claim 64 depends from claim 63 which provides antecedent basis for Applicants' claimed broadcast XML element.

Response D to Office Action of June 15, 2006

Docket No.: 12078-139

III. REJECTIONS UNDER 35 U.S.C. § 103

A. On pages 2-10, in paragraphs 3-4, the Office Action states that claims 1, 2, 7, 8, 29-32, 43-47, 58, 70, and 74-84 (should be 1, 2, 7-9, 11, 29-32, 43-46, 58, 70, and 74-84) are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawamura in view of Freitas.

It is submitted that combining Freitas with Kawamura would render Kawamura unsatisfactory for its intended purpose because Kawamura specifically rejects the use of the diffusion type communication method (Kawamura, page 1, paragraphs 10 and 11) whereas Freitas requires it for control signals (Freitas, col. 3, lines 10-17). Kawamura states a direct emission type infrared communications apparatus and specifically rejects the use of diffusion type communications because of its problems with respect to Kawamura's application, while Freitas states a diffuse transmission capability for its control signal because a direct emission type communication is not robust enough with respect to Freitas's application. Because Kawamura cannot be combined with Freitas without rendering Kawamura unsatisfactory for its intended purpose, it is submitted that claims 1, 2, 7-9, 11, 29-32, 43-46, 58, 70, and 74-84 are not made obvious by the combination of Kawamura and Freitas.

Further arguments in support of patentability with respect to Kawamura and Freitas follow.

With respect to dependent claims 8 and 32, it is submitted that Kawamura teaches away from the use of Applicants' claimed diffuse infrared signal because Kawamura states that more power is required and there are limitations in data rate, and because Kawamura has chosen a direct emission type communications apparatus. *Bausch & Lomb*, 230 U.S.P.Q. at 419 teaches that it is impermissible within the framework of 35 U.S.C. § 103 to pick and choose from a reference only so much of it as will support a conclusion of obviousness to the exclusion of other parts necessary to a full appreciation of what the reference fairly suggests to one skilled in the art. In this case, the reference does not disclose the use of a diffuse infrared signal to accomplish its goal of independent effectuation of communications between individual equipments (Kawamura, paragraph 11). As stated previously, Kawamura and Freitas cannot be combined.

Response D to Office Action of June 15, 2006

Docket No.: 12078-139

For these reasons, it is submitted that Kawamura and Freitas do not make obvious Applicants' claims 8 and 32.

With respect to dependent claim 58, it is submitted that Kawamura does not disclose or suggest a unidirectional signal because Kawamura states that several signals such as requests, indications, responses and confirmations are exchanged between the data link control sections and repeater section (Kawamura, paragraph 141), indicating bi-directional communications. Freitas states a bidirectional system so even if Freitas and Kawamura could be combined, which they cannot be, Freitas does not supply the needed unidirectional communications capability that Kawamura lacks. Unidirectional communications do not provide for the handshaking that bidirectional signals depend upon for data integrity and to prevent data loss. Thus a unidirectional signal is not simply one path of a bidirectional signal, but in fact contains different information. For this reason, it is submitted that Kawamura and Freitas do not make obvious Applicants' claim 58.

With respect to dependent claim 70, it is submitted that nowhere do either Kawamura or Freitas disclose or suggest Applicants' claimed making said information available to a user of said handheld device. Kawamura's system analyzes a frame and stores it, and Freitas's system provides data and control channels, but in neither case is it disclosed or suggested that information is made available to a user of a handheld device. For this reason, it is submitted that Kawamura and Freitas do not make obvious Applicants' claim 70.

With respect to dependent claims 75-77 and 79-81, it is submitted that (1) Kawamura discloses neither Applicants' claimed computer node nor Applicants' claimed line communications network because Kawamura's repeater apparatus 1000 receives infrared radiation, then converts it to an electrical signal (Kawamura, page 7, paragraph 133) but nowhere does Kawamura disclose or suggest that repeater apparatus 1000 is a computer node in a live communications network, and (2) Kawamura and Freitas cannot be combined as stated above. For these reasons, it is submitted that Kawamura and Freitas do not make obvious Applicants' claims 75-77 and 79-81.

Response D to Office Action of June 15, 2006

Docket No.: 12078-139

With respect to independent claims 83 and 84, it is submitted that (1) Kawamura does not disclose or suggest Applicants' claimed diffuse infrared protocol physical layer, and in fact teaches away from the diffuse infrared protocol physical layer, because Kawamura states a system drawn to a direct emission type infrared communications apparatus because of the problems of the diffusion type communication method with respect to Kawamura's application (Kawamura, page 1, paragraphs 7, 8, and 11), and (2) Kawamura and Freitas cannot be combined as stated above. For these reasons, it is submitted that Kawamura and Freitas do not make obvious Applicants' claims 83 and 84.

B. On pages 10-11, in paragraph 5, the Office Action states that dependent claims 9, 11, and 47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawamura in view of Freitas, and in further view of Zaudtke.

It is submitted that (1) Kawamura and Zaudtke do not disclose or suggest Applicants' claimed diffuse infrared signal, and in fact they teach away from an invention that includes such a signal, and (2) Kawamura and Freitas cannot be combined as stated above. Both Kawamura and Zaudtke state direct emission type communication systems (see Kawamura, page 1, paragraph 11, and Zaudtke, col. 7, lines 32-37). Applicants' claims 9 and 11 depend upon claim 8 which states a diffuse infrared signal.

C. On page 11, in paragraph 6, the Office Action states that dependent claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawamura in view of Freitas, in view of Zaudtke, in further view of Inoue.

It is submitted that (1) Kawamura and Zaudtke do not disclose or suggest, and in fact teach away from, diffuse infrared communications (see Applicants' claim 8 upon which claim 10 indirectly depends) (see Kawamura, page 1, paragraph 11, and Zaudtke, col. 7, lines 32-37), (2) combining Zaudtke and Inoue with Kawamura would render Kawamura unsatisfactory for its intended purpose because (a) incoming packets to a particular equipment could be automatically routed to other equipment (Inoue, paragraph 18) without the benefit of traversing Kawamura's converter, (b) mutually communicable applications as possessed by respective equipments (Kawamura, paragraph 242) could cease to operate correctly if both Inoue and Kawamura were

Response D to Office Action of June 15, 2006

Docket No.: 12078-139

providing differing communications frameworks because the applications could be receiving simultaneous, perhaps conflicting, input from incompatible sources, and (c) the presence of Zaudtke's communications interface could further interfere with Kawamura's system because the handheld device of Zaudtke could change the operating conditions of another of the equipments (Zaudtke, col. 2, lines 37-40) such that it was no longer able to be a part of an established connection set of Kawamura; and (3) Kawamura and Freitas cannot be combined as stated above. It is submitted that, for these reasons, the combination of Kawamura, Freitas, Zaudtke, and Inoue cannot make obvious Applicants' claim 10.

D. On pages 10-11, in paragraph 7, the Office Action states that dependent claim 33 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawamura in view of Freitas, and further in view of Inoue.

It is submitted that (1) Kawamura and Freitas cannot be combined as stated above, and (2) there is nothing in the prior art as a whole that suggests the desirability, and thus the obviousness, of making the combination, and no teaching is referenced in the art that supports the combination or modification (*Uniroyal v. Rudkin-Wiley*, 5 U.S.P.Q.2d 1434, 1438 (Fed. Cir. 1988)) because (a) Kawamura does not require the benefits of an XML tag such as identifying tagged content, and (b) Kawamura communicates information through a limited number of requests and confirmations so that there is no suggestion that the broad scope and flexibility of XML is required or desired in Kawamura. For these reasons, it is submitted that Kawamura, Freitas, and Inoue cannot make obvious Applicants' claim 33.

#### IV. ALLOWABLE SUBJECT MATTER

On page 12, in paragraph 8, the Office Action states that claim 85 is allowed.

On page 12, in paragraph 9, the Office Action states that claims 3-6, 48, 59-69, and 71-73 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants hold in abeyance modifications to the objected to claims because

Response D to Office Action of June 15, 2006

Docket No.: 12078-139

they are believed to be in condition for allowance by virtue of their patentability with respect to the cited prior art as discussed above, or their dependence on claims that are believed to be in condition for allowance, as discussed above.

#### V. CONCLUSION

Independent claims 1, 29, 43, and 83-84 are believed to be in condition for allowance. Independent claim 85 has been allowed. All dependent claims depend upon allowable independent claims, and are therefore also believed to be in condition for allowance.

No new fees are deemed to be required. However, in case there are fees required, the Commissioner for Patents is authorized to charge additional fees or credit overpayment to Deposit Account No. 03-2410, Order No. 12078-139.

The following information is presented in the event that a call may be deemed desirable by the Examiner: Kathleen Chapman (617) 345-3210

Respectfully submitted,

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Date: August **20**, 2006

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